

TECHNICAL SERVICE BULLETIN 7.3L - Various Electrical Concerns - Wiring Harness Contacting A/C Compressor Inlet Line

21-2198 28 June 2021

Model:

Ford Engine: 7.3L 2021 F-650/F-750

Issue: Some 2021 F-650/F-750 vehicles equipped with a 7.3L engine may exhibit various electrical concerns and/or various illuminated warning lamps with various diagnostic trouble codes (DTCs) present. This may be due to the powertrain control module (PCM) wiring harness contacting the air conditioning (A/C) compressor inlet line. To correct the condition, follow the Service Procedure to repair any damaged circuits and secure the PCM wiring harness to the main wiring harness.

Action: Follow the Service Procedure steps to correct the condition on vehicles that meet all of the following criteria:

- 2021 F-650/F-750
- Equipped with a 7.3L engine
- At least one of the following concerns:
 - Inoperative exterior/trailer lighting
 - Inoperative anti-lock brake system (ABS)
 - Illuminated ABS warning lamp
 - Lack of Hydro-Max® power steering/braking assist
 - Inoperative cruise control
 - Inoperative upfitter switches
 - Inoperative heated exterior mirror
 - Engine stalls
 - Rough idle/lack of power
 - Inoperative A/C
 - Inoperative front seat air compressor
 - DTCs P1799, P1A40, P1A41, P0571, P0572, P0573, U0101, U0140, U0164, U0211, U0212, U0422, U1011, U0100, P0230, P0231, P0612 and/or P1671

NOTE: Part quantity refers to the number of that service part number required, which may be different than the number of individual pieces. Service part numbers contain 1 piece unless otherwise stated. "As Needed" indicates the part is required but the number may vary or is not a whole number; parts can be billed out as non-whole numbers, including less than 1.

Parts

Part Number	Description	Quantity
LU5Z-14A163-B	High Temperature Cable Tie Strap	1 Piece
GA1Z-14A099-A	Wire Protection Sleeve	1
NAI837X	Coroplast Electrical Wire Harness Tape	As Needed

Warranty Status: Eligible under provisions of New Vehicle Limited Warranty (NVLW)/Service Part Warranty (SPW)/Special Service Part (SSP)/Extended Service Plan (ESP) coverage. Limits/policies/prior approvals are not altered by a TSB. NVLW/SPW/SSP/ESP coverage limits are determined by the identified causal part and verified using the OASIS part coverage tool.

Labor Times

Description	Operation No.	Time	
2021 F-650/F-750 7.3L: Inspect And Repair Wire Harness, Protect And Route The Wiring	212198A	1.1	•

Hrs.

Repair/Claim Coding

Causal Part:	12A581	
Condition Code:	30	

Service Procedure

1. Disconnect PCM connector C175B. (Figure 1)

Figure 1



2. Remove and discard the c-clip retainer to the A/C compressor inlet line below the PCM. (Figure 2) Figure 2



3. Closely inspect the wiring harness for contact with the A/C compressor inlet line below the PCM. (Figure 3) Figure 3



- **4.** If any contact is noticed, carefully remove wiring harness sheathing. Repair all damaged circuits as necessary. Refer to Wiring Diagram, Cell 005. Wrap repaired section of wiring harness at least twice with Coroplast Electrical Wire Harness Tape.
- **5.** Cut the wire protection sleeve into four sections. (Figure 4)

Figure 4



Item Description

1	60 mm (2.4 in.)
2	65 mm (2.6 in.)
3	30 mm (1.2 in.)
4	Not used, 20 mm (0.8 in.)

6. Place the corresponding section of wire protection sleeve over the correct section of wiring harness. Wrap at least twice with Coroplast Electrical Wire Harness Tape leaving no wires exposed. (Figure 5)

Figure 5



- 7. Connect PCM connector C175B.
- **8.** Secure the PCM wiring harness to the main wiring harness using the high temperature cable tie strap. Make sure the cable tie strap only contacts Coroplast Electrical Wire Harness Tape and secures the wiring harness away from the A/C compressor inlet line. (Figure 6)



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NOTE: The information in Technical Service Bulletins is intended for use by trained, professional technicians with the knowledge, tools, and equipment to do the job properly and safely. It informs these technicians of conditions that may occur on some vehicles, or provides information that could assist in proper vehicle service. The procedures should not be performed by "do-it-yourselfers". Do not assume that a condition described affects your car or truck. Contact a Ford or Lincoln dealership to determine whether the Bulletin applies to your vehicle. Warranty Policy and Extended Service Plan documentation determine Warranty and/or Extended Service Plan coverage unless stated otherwise in the TSB article. The information in this Technical Service Bulletin (TSB) was current at the time of printing. Ford Motor Company reserves the right to supersede this information with updates. The most recent information is available through Ford Motor Company's on-line technical resources.